its apex. Prothorax elongated and subconical,—being attenuated anteriorly, and widest just in front of its base, where it is about as broad as (or, if anything, a little broader than) the elytra; very deeply and regularly punctured all over; somewhat convex and even, and with scarcely any indications of a dorsal line. Elytra parallel and rugulose, deeply punctate-striated, and with a row of very minutely impressed points down each of their interstices. Antennæ (especially their scape and club), and the legs, of a paler and clearer colour than the rest of the surface,—being somewhat rufo-ferruginous (or very pale rufo-piceous): the tibiæ (particularly the inner edge of the anterior pair, which are strongly setose) and tarsi of the former, and the club of the latter, very pubescent. Body beneath uniformly and deeply punctured all over,—with the anal region minutely fulvo-pubescent.

Respecting its claims to admission into the British fauna there cannot be the slightest question,—the village of Alphington, in which it was detected, affording no local reasons whatsoever for suspecting that it could have been accidentally introduced. On the contrary, indeed, I am informed by Mr. Hutton (to whom I have dedicated the species) that he has made the most careful inquiries, and that no foreign timber (or material) of any kind, so far as he was able to ascertain, had entered the place. The specimens were found amongst logs of wood, recently cut up for burning; and Mr. Hutton states that it was from out of a hard and undecayed portion of a cherry-tree (in which their winding burrows were very apparent) that he succeeded in extracting them. I should add, that I forwarded an example a few months ago, for comparison, to Berlin, where it was totally unknown; and I have no hesitation, therefore, in regarding it as altogether new to the Curculionida of Europe.

# XV.—On the Genus Lycium. By John Miers, Esq., F.R.S., F.L.S. &c.

[Continued from p. 20.]

### B. NEGGEÆ.

\* Filamenta lævia. Sp. 23.

23. Lycium pallidum (n. sp.);—ramosum, ramulis tortuosis, subnitidis, fusco-rufescentibus, grosse nodosis, breviter spinosis, creberrime foliosis, foliis e nodis fasciculatis, glaberrimis, spathulato-oblongis, obtusis, imo in petiolum tenuem angustatis, utrinque alutaceo-glaucis, carnosulis, eveniis; floribus majus-

culis, in fasciculis binis, folio æquilongis, calyce pedicello paullo breviori, poculiformi, carnosulo, glabro, lacinulis 5 lineari-acutis, tubo æquilongis, patentibus; corolla pallide ochroleuca, tubo cylindrico, supra medium infundibuliformi, limbi laciniis 5, rhomboideo-ovatis, tubo 4to brevioribus: staminibus 5, subæquilongis, longe exsertis, filamentis glaberrimis, medio tubi insertis, hinc geniculatis, et in nervis totidem pilosis ad imum decurrentibus, antheris ovatis, profunde cordatis, connectivo apice in mucrone excurrentibus: stylo filiformi, longe exserto, stigmate clavato, sub-2-labiato.—In Nova Mexico.—v. s. in herb. Hook. (Fendler, n. 670).

This species bears greatly the habit of L. Austrinum, but has a far more pallid aspect: the spines are barely more than 2 inches long; the nodes are large and prominent, and from each of them arises a fascicle of three to ten leaves,  $1\frac{1}{4}$  inch long,  $\frac{1}{4}$  inch broad: the pedicels are 3 lines long; the calvx 2½ lines, fleshy, somewhat bell-shaped, and divided half-way into five equal, pointed divisions, which are considerably spreading: the tube of the corolla is 8 lines long, is contracted to a diameter of  $\frac{1}{6}$  a line in its lower moiety, while the upper half expands gradually to a diameter of 3 lines in the mouth: the segments of the border are short, broad, obtuse, somewhat rhomboidal, 2 lines long and  $2\frac{1}{a}$  lines broad, and as well as the tube are marked with branching nervures; it is quite glabrous, except in the prominent ribs that extend from the base to the point of insertion of the glabrous filaments in its middle: the stamens reach nearly to the extremity of the segments, one however is a little shorter than the others; the anthers, of a deep red colour, are cordate at the base, attached along their upper moiety to an intervening connective, which is excurrently and curvedly mucronate at the apex, as in L. orientale; the style is filiform, of a reddish colour, curved above, and extends \(\frac{1}{4}\) inch beyond the stamens; the stigma is deeply 2-lobed\*.

## \*\* Filamenta pilosa. Sp. 24 ad 35.

24. Lycium fragosum (n. sp.);—fruticosum, ramosum, ramulis cortice fusco rimoso, axillis grosse nodosis, nodis breviter spinosis, foliis e nodis fasciculatis, anguste linearibus, margine revoluto subtus quasi 3-costatis, utrinque glanduloso-rugosis; floribus e fasciculis solitariis, pedunculo capillari folio æquilongo, calyce scabrido, urceolato, ad medium lacinulis 4 acutis erectis partito, corolla glabra, anguste cylindrica, superne paullulo infundibuliformi, calyce 6plo longiori, limbi laciniis 4, brevibus, rotundatis, margine ciliatis, tubo 7mo brevioribus,

<sup>\*</sup> An outline of this plant with floral analysis is given in the 'Illustr. South Amer. Plants', vol. ii. plate 67 C.

staminibus 4 inclusis, 1 paullo longiori, filamentis infra medium tubi insertis, hinc longiuscule pilosis, superne glabris, tenuibus; stylo longitudine staminum, stigmate clavato, 2-lobo.—Peru.—v. s. in herb. Hook. (Cuming, 948).

This forms a very distinct species, with rugous knotty branches and naked spines, 2 lines in length, springing out of the nodes: there are five to ten leaves in each fascicle, 4 or 5 lines long, and  $\frac{1}{4}$  line broad: the slender peduncle measures 4 lines; the somewhat tubular calyx is  $1\frac{1}{2}$  line long, half cleft into four narrow, acute, equal segments, each separated by a rounded sinus; the tube of the corolla is 5 lines long,  $1\frac{1}{2}$  line in diameter at its broadest part, the lobes of the border being only  $\frac{3}{4}$  line; the filaments are inserted into the tube at a distance of a quarter of its length from the bottom, and are pilose at base for one-fourth of their length\*.

25. Lycium implexum (n. sp.);—fruticosum, intricato-ramosum, ramis ramulisque rimoso-rugosis, ochraceis, glabris, ramulis nodosis, apice spinescentibus, spinisque axillaribus brevibus aciculatis armatis; foliis e nodis fasciculatis, minimis, cuneato-oblongis, carnosis, utrinque aspero-pilosis, floribus e fasciculis approximatis, solitariis, pendulis, pedunculo folio calyceque æquante; calyce parvo, pubescente, æqualiter 4-dentato, co-rolla pallida, elongata, anguste cylindrica, superne infundibuliformi, extus glabra, intus ad medium pubescente, limbi laciniis 4, brevibus, rotundis, lævibus, tubo 5to brevioribus, staminibus 4 capillaribus, subæqualibus, longe exsertis, infra medium tubi insertis, pro dimidio inferiori molliter pubescentibus, superne lævibus, pro tertia parte exsertis, stylo longitudine staminum.—Chile, ad Coquimbo.—v. s. in herb. Hook. et Lindley (Bridges, n. 1334).

This very distinct plant bears greatly the aspect of several species of the genus Alona, and of Phrodus, which I have before described (huj. op. iv. 33), all collected in the same neighbourhood, and at the same time, by Mr. Bridges, as their respective numbers will show. The branches and branchlets are very knotty and intricately crossed; the prominent, nodose axils, scarcely 3 lines apart, have a fascicle of four to eight leaves springing from them, and many are furnished with a short needle-formed spine. The leaves are spathulately oblong, obtuse, fleshy, glaucously pubescent on both sides, with short, rigid, erect hairs; they are 1 or  $1\frac{1}{2}$  line long, and scarcely more than  $\frac{1}{4}$  line broad: the peduncle, often deflexed, is 1 line long, and about the same length as the pubescent calyx, which is divided half-way into

<sup>\*</sup> This species with sectional details is represented (loc. cit.) plate 67 D.

four linear, obtuse, erect teeth: the corolla is 5 or 6 lines long,  $\frac{1}{4}$  line broad towards the base, but swelling to  $\frac{1}{2}$  line in diameter at its mouth, the four smooth, almost orbicular lobes of the border being about  $\frac{3}{4}$  line diameter; the capillary filaments are inserted into the tube at a distance of one-third of its length from the base; they are 4 lines long, and are pubescent for two-thirds of their length, the inner surrounding portion of the tube being also pubescent for about the same distance. This species, although with acicular spines, will be seen to be extremely different from L. rachidocladum, described by M. Dunal from the same locality\*.

26. Lycium minutifolium, Remy in Gay Hist. Chile, v. 93; Walp. Ann. iii. 173;—ramosissimum, ramulis spinescentibus; foliis fasciculatis, minutissimis, ovatis, obtusis, hirsutis, pedunculis axillaribus, solitariis, calyce 4-dentato, vix puberulo, corolla anguste tubulosa, longiuscula, apice vix dilatata, limbo 4-fido, staminibus vix exsertis.—Chile.

From the above description we may infer that this plant bears much analogy with the preceding, apparently differing in its ovate leaves and scarcely exserted stamens.

27. Lycium stenophyllum, Remy, loc. cit. p. 94;—spinescens, ramosum; foliis fasciculatis, inæqualibus, linearibus, crassiusculis, obtusis, pubescentibus, 3 lin. longis; floribus solitariis, axillaribus, calyce 4-fido, pubescente, segmentis oblongis, obtusis; corolla tubulosa.—Chile.

From the above description it is not clear to which section this species belongs; but from its 4-merous flowers and its habit, it is probably nearly allied to the two preceding species.

28. Lycium cestroides, Schl. Linn. vii. 70. Acnistus cestroides, nob. Ill. So. Am. Pl. i. 23; Dun. in Prodr. DC. xiii. 500; —breviter spinosum, ramis subflexuosis, albescentibus, junioribus pubescentibus, ramulis brevibus, floriferis, apice spinosis; foliis alternis, ellipticis, oblongis, apice acuminatis, imo cuneatis, margine subreflexo obsolete crenulato puberulo, nervosis, utrinque subglabris et minutissime rugulosis, sub lente glanduloso-scabridis, subtus pallidis, petiolo tenui, longiusculo, canaliculato, puberulo: floribus pedunculatis, calyce tubuloso pallide membranaceo, lineis 5 viridibus late costatis signato, pubescente, 5-dentato, dentibus acutis, erectis, intus margineque albido-lanatis; corolla longe tubulosa, imo angustiore, calyce 5plo longiore, glabra, limbi laciniis 5, rotundis, margine densissime albo-fimbriatis, erectis, valde imbricatis; sta-

<sup>\*</sup> A representation of this plant with details is given (loc. cit.) plate 67 E.

minibus 5, inæqualibus, inclusis, medio tubi insertis, 2 longioribus faucem vix attingentibus, imo pubescentibus, ovario oblongo, corollæ circumscissæ reliquo induto, stylo incluso, apice incrassato.—Banda Oriental et Tucuman.—v. s. in herb. Hook. Santiago del Estero (Tweedie)\*.

This species was formerly referred by me to Acnistus (loc. cit.) on account of its shrubby habit, large leaves, and crowded fasciculate or umbellate flowers, the lobes of the corolla having woolly margins; but my knowledge of it was then only derived from Schlechtendal's description. Since that time I have seen a specimen of a plant, evidently referrible to the same species, which at a first glance bears more the aspect of an Acnistus or a Cestrum, than a Lycium: on closer inspection, it will be found that the flowers are only crowded, by the close approximation of the axils. The lobes of the border are not tomentose, as in Cestrum or Acnistus, but densely ciliated, and have a very decided imbricated æstivation; these circumstances, together with the structure of the stamens, and the cupular induvium of the corolla that surrounds the ovarium, mark unquestionably the genus to which it really belongs. Tweedie's plant, although from a somewhat distant locality, is evidently the same species as Sellow's; both may be said to grow within the same region. It appears to be a very frondose shrub, with large leaves, and generally unarmed; but sometimes it bears short spines in some of its upper floriferous axils. The leaves are alternate; and their axils produce in the following year short branchlets, with very approximate leaflets, which assume somewhat the appearance of fasciculated clusters. The younger leaves are pubescent, upon long slender petioles; but as they grow older, they become glabrous, except at the base and on the petiole, where by a lens the remaining pubescence is always distinguishable. The larger leaves measure  $3\frac{1}{a}$  inches in length, including the petiole of 5 lines, upon which the narrowing base of the blade is somewhat decurrent; they are 10 lines broad: other leaves vary from  $1\frac{1}{6}$ to  $2\frac{1}{2}$  inches in length, and 7 to 9 lines in breadth. Schlechtendal describes the leaves as having short petioles; but the difference is probably accidental, depending on the comparative breadth of the decurrent portion of the blade on the petiole. The floriferous branchlets, often terminating in a spine, are  $\frac{3}{4}$  to 1 inch long, and bear many small crowded leaves, and very numerous flowers in almost aggregated clusters. The peduncles are slender, somewhat thicker above, and 4 lines long: the calyx is tubular,  $1\frac{1}{a}$  line long, with 5 acute, short, erect teeth, from which as many

<sup>\*</sup> A figure of this species with analytical details is shown ( $loc.\ cit.$ ) plate 67 F.

costate nervures descend to the base; the teeth, more especially, are covered with whitish pubescence. The corolla is cylindrical, slightly swollen below the mouth; the tube is 6 lines long,  $1\frac{1}{a}$ line diameter in the broader part, and quite smooth; the lobes of the border are erect, orbicular, very small, 18th the length of the tube, and are fimbriated on the margin with numerous ciliated white hairs: the stamens are enclosed; two of them nearly reach the mouth of the tube, the other three being little more than half their length; all are pilose for a short portion of their length, above the point of their insertion in the middle of the tube: the style is slender below, much thickened above the middle, slightly curved, and the length of the longer stamens: the stigma is clavate and sub-bilobed: the ovary is narrow, oblong, smooth, somewhat shorter than the calyx, and is invested at its base by the very short induvial cup of the corolla: Schlechtendal states that the berries are globose, red, and 3 lines in diameter.

29. Lycium elongatum (n. sp.);—glaberrimum, ramosum, ramulis elongatis, spinescentibus, nodoso-flexuosis, glauco-griseis; foliis 4–8, fasciculatis, lineari-subulatis, obtusiusculis, imo in petiolum gracilem longe attenuatis, carnosulis; floribus in fasciculis solitariis, pedunculo folio dimidio breviori, calyce brevi, tubuloso, 5-costato, acutissime 5-partito, corolla longe et anguste tubulosa, glabra, sicca rubescente, imo coarctata, superne vix infundibuliformi, limbi laciniis 5 breviter ovatis, staminibus brevissimis, inclusis, ultra medium insertis, glabris, in nervis totidem hirsutulis tubi decurrentibus, 3 longioribus faucem vix attingentibus, 2 alteris istis dimidio brevioribus; stylo corollæ tubo æquilongo.—Prov. Argentinas.—v. s. in herb. Hook.; in desertis salsuginosis intra Cordovam et Santiago de Tucuman (Tweedie, n. 1212).

This plant, although very different in its growth, has its flowers very similar to those of the preceding species. Tweedie remarks that this and similar species, all low-growing shrubs, abound here and in Patagonia in endless varieties; (by Patagonia he means the southern portion of the province of Buenos Ayres.) The leaves, including the petiole of one-half their length, are 4 to 6 lines long and  $\frac{1}{2}$  line broad: the slender peduncle is  $1\frac{1}{2}$  line long: the narrow, glabrous, tubular calyx, marked with deep red lines, is  $1\frac{1}{4}$  line long, and is half cleft into five acute linear teeth, having pubescent margins: the tube of the corolla is 4 lines long, its ovate lobes are barely  $\frac{\pi}{4}$  line long, the three longer stamens are 1 line, the two shorter ones  $\frac{1}{6}$  line in length\*.

<sup>\*</sup> This species is delineated (loc. cit.) plate 68 A.

30. Lycium fuscum (n. sp.);—intricato-ramosum, spinosum, foliis glaberrimis, fasciculatis, late ovatis, in petiolum brevius-culum attenuatis, eveniis, crassiusculis, glauco-viridibus, fuscis, utrinque glanduloso-rugosis, vel elevato-punctatis; floribus e fasciculis solitariis, breviter pedunculatis, calyce brevi, cupuliformi, breviter 4-dentato, corolla fusco-purpurea, longe tubulosa, subincurva, imo angustiore et sulcata, superne paullo ampliore, limbi laciniis 4, brevissimis, suborbiculatis, margine dense albo-fimbriatis, staminibus 4 inæqualiter exsertis, filamentis in coarctationem tubi insertis, hinc geniculatis et hirsutis, inferne in nervis totidem prominulis glabris deliquescentibus, superne lævibus, stylo staminibus multo longiore; bacca cærulescente, ovali, breviter apiculata, calyce suffulta.—In Andibus Provinciæ Mendozæ.—v. v. ad San Pedro de Uspallata.

I found this plant growing abundantly in the above-named portion of the Cordillera; unfortunately the only specimen gathered during my last rapid journey over the Andes was lost, but some of the leaves and flowers were preserved with the berries, collected at the same time. The leaves are somewhat fleshy, roundly oval, 3 lines long and 2 or 3 lines broad, suddenly narrowed into a short petiole 2 lines in length: the peduncle is 2 lines long; the cup-shaped calyx is  $1\frac{1}{2}$  line long, with four short equal teeth; the tube of the corolla is  $5\frac{1}{2}$  lines long, the lobes of the border  $\frac{1}{2}$  line in diameter, and are remarkable for their fimbriated margins, as in L. cestroides\*.

31. Lycium confertum (n. sp.); -- intricato-ramosum, ramulis nodoso-flexuosis, spinosis, rarius inermibus, cortice cano, rimoso, spinis brevibus in axillis approximatis: foliis 6-10, valde fasciculatis, angustissime linearibus, in petiolum spathulatis, glaberrimis; floribus in fasciculis solitariis, breviter pedunculatis, calyce cylindrico, pilosulo, laciniis 5 subulatis, tubo æquilongis; corolla anguste tubulosa, vix infundibuliformi, imo coarctata, extus pubescente, imo in contractionem tubi annulo dense barbato cincta, limbi laciniis ovatis, glabris, tubo 7mo brevioribus, staminibus inæqualibus, inclusis, filamentis in medio tubi insertis, longiuscule hirsutis, superne lævibus, 2 longioribus faucem attingentibus, 2 vix æquilongis, 1 dimidio fere breviori, stylo exserto, bacca ovata, parvula. coccinea, calyce suffulta.—In desertis salsuginosis Prov. Mendozæ et Sancti Ludovici. -v. v. et spec. lexi; abundat in Travesiam a Mendoza usque ad Coral de Desaguadero et ad Alto del Yeso, Prov. S. Luiz.

This species I found abundantly along the Desert track all the

<sup>\*</sup> This plant with floral details is shown (loc. cit.) plate 68 B.

way from Mendoza to San Luiz. It varies in having the leaves more or less crowded, more or less attenuated; they are from 3 to 6 lines long,  $\frac{1}{4}$  line broad; the peduncle is  $1\frac{1}{2}$  or 2 lines long; the calycine tube is cylindrical,  $\frac{5}{4}$  line long, with narrow, linear, acute segments  $1\frac{1}{4}$  line long: the tube of the corolla is 4 or 5 lines long, the segments of its border are  $\frac{5}{4}$  line long, the larger stamens are 2 lines in length: the oval berry is 3 lines long\*.

- 32. Lycium Berlandieri, Dun. in DC. Prodr. xiii. 520.—Mexico, prope Laredo (Berlandier).
- 33. Lycium senticosum (n. sp.);—intricato-ramosum, ramis tortuosis, angulatis, griseo-helvolis, fere aphyllis, ramulis patentibus, apice spinosis, foliis e nodis cottoneis prominentibus paucis (2-3) fasciculatis, parvulis, lineari-spathulatis, obtusis, glabris; floribus solitariis, folio duplo longioribus, pedunculatis, glabris; calyce parvo, poculiformi, inæqualiter 4-dentato, dentibus acutis, tubo duplo brevioribus; corollæ pallide flavæ tubo imo coarctato, infra e medium repente ac late campanulato, limbi laciniis 4, curtissimis, tubo 4to brevioribus, rotundato-deltoideis, reflexis; staminibus 4 exsertis, 2 paullo longioribus, filamentis in coarctationem tubi insertis, hinc geniculatis et longiuscule hirsutis, superne capillaribus et glabris, stylo staminibus longiore.—Mexico, ad Monterey.—v. s. in herb. Hook. (Berlandier, Jan. 1828).

This is evidently very near L. Berlandieri, and may possibly be only a tetramerous variety of it. It appears to be more barren of leaves, which are smaller and fewer in each fascicle: the leaves are  $2\frac{1}{2}$ —3 lines long,  $\frac{1}{2}$  line broad; the pedicels are  $2-2\frac{1}{2}$  lines long, the calyx is nearly a line long, the tube of the corolla 2 lines, the segment of the border  $1\frac{5}{4}$  line in length; the contracted portion of the tube is narrow, and a little longer than the calyx, when it is suddenly enlarged into a bell-shaped form; the style is the length of the longer stamens, and the lower part of the ovarium is encircled by the cupular remains of the corolla, which here breaks away by a circumscissile line: this same process is described as existing in L. Berlandieri; but it partakes in no degree of the nature of a disk, as stated by M. Dunal†.

34. Lycium barbinodum (n. sp.);—intricato-ramosum, subinerme, valde foliosum, ramis angulatis summe nodosis, cortice fusco, nodis majusculis, prominentibus, subglobosis, albido-cottoneis; foliis plurimis (6-8) fasciculatis, internodiis duplo longioribus,

<sup>\*</sup> This species with sectional details is represented (loc. cit.) plate 68 C. † A drawing of this plant with floral analysis is shown (loc. cit.) plate 68 D.

lineari-spathulatis, obtusis, imo in petiolum brevem deliques-centibus, glaberrimis, carnosulis; floribus parvulis in fasciculis solitariis, cum pedicello brevi folio dimidio curtioribus, calyce brevi, poculiformi, reticulato, fusco, brevissime 5-dentato, demum inæqualiter 2-3-fisso, dentibus sphacelato-pubescentibus; corollæ tubo imo coarctato, hinc repente campanulato, glabro, limbi laciniis 5, orbicularibus, margine subciliatis, tubo 4to brevioribus; staminibus 5, vix æqualibus, subexsertis, filamentis imo geniculatis in coarctationem tubi insertis, longiuscule hirsutis, superne glabris; stylo imo articulato, staminibus paullo longiore; ovario corollæ reliquo cupuliformi imo circumdato.—Mexico Septentrionali.—v. s. in herb. Hook. (Sierra Madre) Seemann, no. 2090.

A very leafy species, remarkable for its conspicuous, cottony, knotty axils, which are from  $\frac{1}{4}$  to  $\frac{1}{2}$  inch apart: the leaves, four to six in each fascicle, are 8 to 10 lines long,  $1\frac{1}{2}$  to 2 lines broad: the flowers are about the size and shape of those of the preceding species; the peduncle, equal in length to the calyx, is 1 line long; the corolla is 3 lines long; the segments of the border are  $\frac{3}{4}$  line long and broad\*.

35. Lycium glomeratum, Sendtn. in Flor. Bras. fasc. 6. p. 154; Dunal in DC. Prodr. xiii. 512.

This very distinct species, fully described by Dr. Sendtner and M. Dunal, is remarkable for its approximated large leaves and copious fascicles of flowers. It is a small tree, growing commonly along the banks of the river San Francisco, about eighty miles from its mouth, where it is called Espinha, though it is generally unarmed. Its branches are much used by the natives for making fences. A variety, which may be called obovatum, on account of its more ovate and obtuse leaves, exists in Sir William Hooker's herbarium, collected by Mr. Gardner on the Ilha de San Pedro, an island near the mouth of the river San Francisco†.

- \*\*\* Filamenta paullo supra basin geniculatum globula pilorum donata. Sp. 36 ad 38.
- 36. Lycium nodosum (n. sp.);—glaberrimum, inerme, ramis flexuosis, cortice rimoso, albescente, ramulis virgatis, axillis approximatis, nodosis, cottoneis; foliis (2-5) fasciculatis, rarius solitariis et alternis, ovato- vel oblongo-spathulatis, apice rotun-

<sup>\*</sup> A representation of this species with explanatory sections is given (loc. cit.) 68 E.

† This species is shown (loc. cit.) plate 68 F.

datis, imo in petiolum brevissimum attenuatis, eveniis; floribus in axillis solitariis, calyce cupuliformi, brevissimo, crassiusculo, æqualiter et acute 4-dentato; corollæ glabræ tubo infundibuliformi, limbi laciniis brevibus, latis, reflexis; staminibus 4, subæqualibus, longissime exsertis, filamentis in coarctationem tubi insertis, hinc geniculatis et barbatis, uno paullo breviori; stylo staminibus æquilongo; ovario disco carnoso adnato, et corollæ reliquo cupuliformi imo circumdato.—Provincia Tucuman Argentinorum.—v. s. in herb. Hook. (Tweedie).

The leaves are 5 to 7 lines long,  $1\frac{1}{2}$  to  $2\frac{1}{4}$  lines broad; the peduncle is 2 lines long; the calyx is  $\frac{1}{2}$  line long; the length of the tube of the corolla is  $2\frac{1}{4}$  lines, of the segments of its border  $\frac{1}{2}$  line; the stamens are  $1\frac{1}{2}$  line longer than the tube, and are inserted one-third of the distance from the base\*.

37. Lycium vimineum (n. sp.);—inerme, ramulis virgatis, rectiusculis; foliis 2-3nisve (interdum 5nis) fasciculatis, linearibus, imo in petiolum brevem attenuatis, eveniis; floribus e fasciculis 2-3nisve parvulis, calyce 4-dentato pedunculo vix breviori, dentibus æqualibus acutis margine ciliatis tubo lævi, poculiformi paullo brevioribus; corollæ glabræ carnosulæ breviter et late cylindricæ tubo paullo supra basin breviter coarctato, hinc subcampanulato, limbi laciniis 4, late subdeltoideis, reticulato-venosis, tubo tertio brevioribus, reflexis: staminibus 4, æqualibus, exsertis, filamentis paullo supra basin insertis, hinc glabris et geniculatis, mox fasciculatim barbatis, maculis totidem pilosis intra tubum alternatim interjectis, stylo staminibus æquilongo.—Prov. Santa Fè Argentinorum.—v. s. in herb. Hook. (Tweedie).

This is said by Tweedie to be a shrub 12 to 20 feet high, evidently with long, slender, pendent branchlets, growing very plentifully near the town of Santa Fè, on the river Paraná: the branchlets are slender, of a light brown colour, smooth and striated. Two, three, or more leaves grow in a fascicle out of each cup-shaped axillary node; they are 10 to 16 lines long, 1 or 2 lines broad; two or three flowers spring out of each fascicle of leaves, one after another, at distant periods; the peduncle is  $1\frac{1}{2}$  or 1 line long; the smooth cup-shaped calyx is of the same length, and is crowned by four equal triangular teeth with ciliated margins: the corolla is contracted near the base, is broadly campanular above, with four short and broad reflected segments, the length of the tube being  $2\frac{1}{4}$  lines, and of the segments  $\frac{3}{4}$  line: the stamens, inserted a little above the

<sup>\*</sup> A drawing of this plant with sectional details is given ( $loc.\ cit.$ ) plate 69 A.

base of the tube, are 3 lines long; the style is  $3\frac{1}{2}$  lines in length; the lower moiety of the ovary is enclosed in the cup-shaped induvial base of the corolla\*.

38. Lycium brevipes, Benth. Voy. Sulphur, 40; DC. Prodr. xiii.; —spinosum, glaberrimum, ramulis striatulis, subflexuosis, nitidis, stramineis, apice spinosis; foliis solitariis, 2-3nisve, cuneato-oblongis subovatisve, obtusis; floribus parvis, brevissime pedunculatis, solitariis; calyce brevi, poculiformi, 5-dentato; corollæ tubulosæ tubo calyce 5plo longiori, limbi laciniis 5, brevibus, rotundatis, reflexis; staminibus insertis. —California.—v. s. in herb. Hook.—Magdalena Bay (Barclay), specim. flore manco.

A spiny shrub with a barren aspect, apparently with few obvate leaves, which are 4 to 9 lines long, narrowed at the base into a slender petiole, and 2 to 3 lines broad. The specimen above referred to has only a single imperfect flower, with a peduncle  $\frac{1}{2}$  line long; the calyx measures 1 line, the corolla 3 lines, including the segments of its border  $\frac{1}{2}$  line in length; more perfect flowers, according to Mr. Bentham, are 5 lines long†.

[To be continued.]

## XVI.—Note on the supposed Antheridia of Rhamnus. By J. S. Burdon Sanderson, M.D.‡

### [With a Plate.]

In Mohl and Schlechtendal's 'Bot. Zeitung' for 1844, certain peculiar organs are described by Dr. Grisebach as occurring on the stipules of the rudimentary leaves forming the centre of the leaf-bud of several species of Rhamnus and other plants belonging to different orders. In these organs, to which he applies the term corynidia, Dr. Grisebach finds a structure which he supposes to resemble that of the antheridia of the higher Cryptogamia. Any evidence to prove the occurrence of antheridia among the Phanerogamia must, if confirmed, necessarily alter the views which we are now entitled to entertain of the general signification of the organs in question: it appeared therefore desirable to repeat the observations above alluded to. With this object I procured, through the kindness of Prof. Balfour, a sufficient number of the buds of several species of Rhamnus, viz.

<sup>\*</sup> This species with sectional details is represented (loc. cit.) plate 69 B.

<sup>†</sup> This species with floral sections is represented (loc. cit.) in plate 69 C. ‡ Read before the Botanical Society of Edinburgh, May 9, 1854.